MDR-iVS01 User's Manual

Part 1

(Product Overview)

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1. Product Overview

1.1. MDR-iVS01

MDR-iVS01 server is 1ch Network Video Server, which transmits digital images captured by Analog CCD camera over the Internet. So users can view real-time live images over the Internet at anytime and anywhere using the standard web browser such as MS Internet Explorer or Netscape Communicator. There is no need other specific software to view real-time live images over the Internet. MDR-iVS01 server is state-of-the art device and leads new generation of monitoring and security solution.

Picture 1 : MDR-iVS01

1.2. Key Functions of MDR-iVS01

1. Standalone device built-in web server
2. Max 30 fps transmission speed on TCP/IP network
1. 10M/100M Auto Sensing Ethernet
2. Effective Bandwidth & Bit-rate Control by H.264
3. Built-in 2 way Audio transmission (1ch A-in, 1 A-out)
4. Supports Dynamic IP users by www.ipcctvdns.com server
5. Supports Sensor Input, Digital Output
6. Supports Transparent mode
7. Encryption function by user authentication
8. Image transmission function via FTP, Email
9. Supports Various PTZ (Pan/Tilt/Zoom) Devices
10. 1CH V-out for displaying on analog monitor

1.3. Technical Specification of MDR-iVS01

Model Name	MDR-iVS01
Hardware	32bit Embedded CPU Flash 8Mbytes /SDRAM: 128Mbytes Linux version 2.6.14 operating system Battery backed up real-time clock
Video compression	Motion JPEG H.264
Resolution	NTSC: 720 x 480,704x480,352x240,176x112 PAL: 720 x 576, 704x576,352x288,176x144
Frame rate (each channel)	Motion JPEG: Up to 30/25 fps at D1 (Secondary Stream at QCIF) H.264: Up to 30/25 fps at D1 (Secondary Stream at QCIF)
Video Streaming	Motion JPEG and H.264 Dual Streaming (Simultaneously) Controllable frame rate and bandwidth
Image setting	Compression levels: 6 (Motion JPEG) / 6 (H.264) Color: color, black & white
Audio	8 bit PCM(G.711-u-low), Sampling rates 8KHz, Mono Audio 1ch in & 1ch out
LAN interface	10/100BaseT Ethernet auto sensing
Alarm I/O Interface	1 Photo-coupled inputs and 1 Relay output
Video Input	1 Channel Composite Video Input
Video Output	1 loop through analog video outputs
Serial Interface	Two serial ports for console, modem(PSTN & GSM), serial input/output device, PTZ COM Port is RS-232, AUX port can be configured as RS-485 Max Baudrate: 115200 bit/s
Security features	Multi user level protection for camera access, PTZ, Alarm I/O
Advanced Service	Up to 15.5M memory for Pre/Post alarm buffer e-mail, FTP, alarm Buffer by event or schedule IP notification, Alarm Notification to e-mail, CGI Call by event or schedule
Built-in Motion detections	Accuracy: 12x12=144 blocks Motion Sensitivity : -100 ~ 100 : 100 is hypersensitive
Others	Transmit Serial input data transfer with Video IP notification by e-mail
Management	Configurable by serial, web or telnet Remote system update via telnet, FTP OR web browser.
PWR Supply	SMPS input: 100~240VAC, 300mA Output: DC 12 Volt, 800mA
PWR Consumption	DC 12Volt 500 mA
Operating Environment	Temperature: 32° ~ 122°F (0° ~ 50°C) Humidity: 20 ~ 80% RH(non-condensing)

Users	16 simultaneous users
Installation, management and maintenance	Installation CD and web-based configuration Firmware upgrades over HTTP or FTP , firmware available at www.microdigital.co.kr
Video access from Web browser	Video access from Web browser
Minimum Web browsing requirements	Pentium III CPU 500 MHz or higher Windows XP, 2000, NT4.0*, Internet Explorer 6.x or later
Supported protocols	HTTP, TCP/IP, FTP, Telnet, RARP, PPP, PAP, CHAP, DHCP, SMTP client(e- mail), NTP, Java, RTP/RTSP, UPnP
Applications	MicroDigital CMS, MicroDigital Software NVR (MDR-IS004)

Table 1 : MDR-iVS01 Specification

1.4. MDR-iVS01 Packing List

MDR-iVS01's packing box includes the following items.

MDR-iVS01	1ea	
Power Supply Unit (Power Cable & SMPS DC12V 0.8A Adapter)	1ea	
Direct Cable	1ea	
CD (User's Manual, Installation wizard, Picture, etc)	1ea	
MD-PWE Adapter (To supply to power through the LAN Cable.)	Option	
MD-POE Adapter (To supply to power through the LAN Cable From POE Router.)	Option	

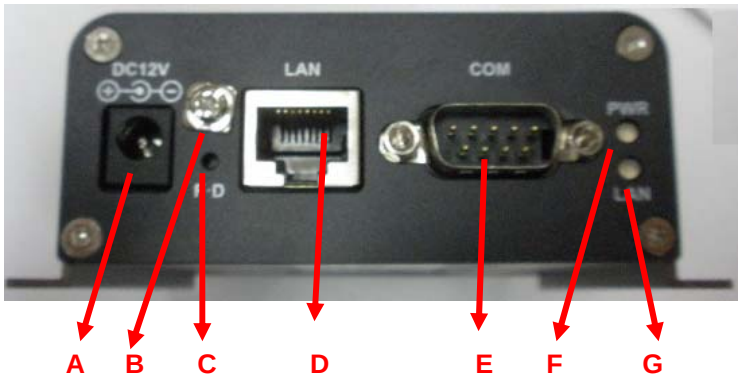
Table 2 : MDR-iVS01 Packing List

☞ *Please check all the listed items are included in your package. For any missing items, please contact your local distributor.*

2. Hardware Description

2.1. MDR-iVS01 Front Panel View

Picture 2 : MDR-iVS01 Front Panel

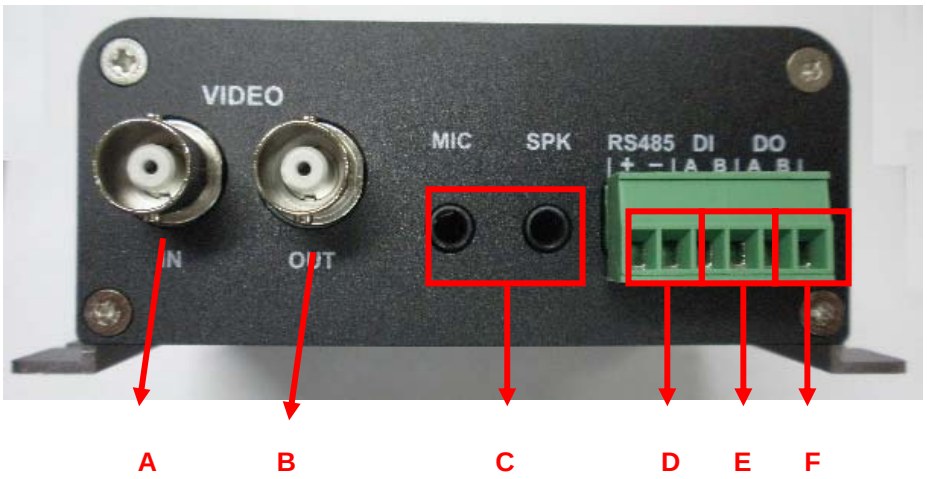


	Name	Description
A	Power	Power input ports for DC 12V 0.8A [SMPS]. Ensure to use the original power supply unit from the package.
B	Grounding Connector	Grounding Connector
C	Factory Default Button	This button can reset the factory default settings at the system. Especially when a user lost his/her admin-password, or when it got any uncertain faulty operation. - After reboot the system, wait until hearing two times of beep sound. - Keep pressing FD button for 5~10 seconds until hearing three times short beep sound. ACT LED blinks during the process. The system will reboot automatically when it's completed.
D	LAN	LAN Port for 10/100M Base T Auto sensing.
E	COM	RS-232 ports for Serial input device, Modem or Console (HyperTerminal connection).
F	POWER LED (RED/GREEN)	RED light – It blinks RED when power on. GREEN light – It blinks GREEN when IP setup is done.
G	LAN(Tx/Rx) LED (RED/GREEN)	RED light – It blinks RED when data is being transmitted on the connected LAN port GREEN light – It blinks GREEN only when LAN port is connected without data transmission.

Table 3 : MDR-iVS01 Front Panel Description

2.2. MDR-iVS01 Rear Panel View

Picture 3 : MDR-iVS01 Rear Panel View



	Name	Description
A	Video In	BNC cable port for 1ch Video input.
B	Video Out	1ch Video Output port displaying on Analog Monitor.
C	MIC, SPK	1ch Audio Output and Input
D	RS485	RS-485 Ports for PTZ
E	DI (SENSOR)	Signal input ports for sensor and contact.
F	DO (ALARM)	Signal output ports for alarm and light.

Table 4 : MDR-iVS01 Rear Panel Description

3. MDR-iVS01 H/W installation and basic setup

3.1. Before installation,

1. Read carefully User's Manual
2. Check-out if the power source is stable or not at the environment.

3.2. Factory Default Condition

The following table shows the factory default condition. Please refer to this when you need to change the values on admin menu.

	Factory Default Condition
Admin ID	root
Admin password	root
IP address	10.20.30.40
Network mask	255.255.255.0
Gateway	10.20.30.1

Table 5 : Factory Default Condition

☞ *Factory default Admin ID and Password are all **lower case letters**. You can change the password with Capital letters.*

3.3. MDR-iVS01 H/W Installation

Following steps show the physical installation process for MDR-iVS01.

1. Install CCTV cameras at each required position.
2. Connect BNC cable between CCTV camera's V-out and MDR-iVS01's V-in.
3. Connect a LAN cable at MDR-iVS01 in your local network.
4. Connect the power cable at MDR-iVS01.

After that, you need to follow the steps below.

5. First, Network Configuration by MD-installer.
6. Second, Camera Configuration by MD-installer or admin-menu.
7. Third, Service Configuration by MD-installer or admin-menu.

☞ ***For IP setup**, refer to "Chapter 2.Network Configuration" on User's Manual Part2.*